

**BEHAVIORAL MOMENTUM AND STIMULUS FADING IN  
THE ACQUISITION AND MAINTENANCE OF CHILD  
COMPLIANCE IN THE HOME**

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The provision of a series of requests to which compliance is highly likely (high-probability requests) immediately antecedent to low-probability requests has been used to establish behavioral momentum of compliance. We evaluated a fading procedure for maintaining high levels of compliance obtained with high-probability requests. Fading involved a systematic reduction in the number of high-probability requests and an increase in the latency between the high- and low-probability requests. High levels of compliance for both "do" and "don't" requests were maintained for 16 weeks in a 5-year-old boy with developmental disabilities after the high-probability request sequence was faded. Similar maintenance was obtained for "do" requests in a 15-year-old girl with developmental disabilities. For this subject, however, the high-probability request sequence was ineffective with "don't" requests. When "don't" requests were phrased as "do" requests, the high-probability request sequence produced high levels of compliance to the low-probability request. High levels of compliance to these "do" requests were maintained for 16 weeks after the high-probability request sequence was faded.

**DESCRIPTORS:** behavioral momentum, stimulus fading, noncompliance, high-probability request sequence

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Child noncompliance to parental requests is one of the most commonly cited behavior problems (Houlihan, Sloane, & Jones, 1992). Treatment of noncompliance typically includes training parents to use effective requests, positive reinforcement of compliance, and a consequence for noncompliance, such as time-out (e.g., Forehand & McMahon, 1981; Hobbs, Forehand, & Murray, 1978; Scarborough & Forehand, 1975) or guided compliance (e.g., Parrish, Cataldo, Kolko, Neef, & Egel, 1986; Whitman, Zakaras, & Chardos, 1971). Both of these procedures require physical manipulation of the child and may present difficulties when noncompliance is accompanied by resistance, aggres-

sion, and other aberrant behaviors (Roberts, 1982, 1984).

Recently, a procedure for facilitating compliance to requests without using a physical consequence was evaluated (Horner, Day, Sprague, O'Brien, & Heathfield, 1991; Mace et al., 1988; Singer, Singer, & Horner, 1987). The procedure involves the delivery of a series of high-probability (high-*p*) requests (i.e., requests to which compliance is highly likely) immediately prior to a low-probability (low-*p*) request (i.e., a request that is typically followed by noncompliance). Mace et al. (1988) discussed the resulting increase in compliance to low-*p* requests in terms of behavioral momentum (Nevin, 1979), the tendency for behavior that has been maintained through specific schedules of reinforcement to persist when the reinforcement conditions have changed.

Although the effectiveness of the high-*p* request sequence has been demonstrated, the reversibility

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of the phenomenon has been equally evident; when the high-*p* sequence is withdrawn, compliance to low-*p* requests typically returns to baseline levels (Horner et al., 1991; Mace et al., 1988; Singer et al., 1987). Methods for increasing the durability of compliance with this technique, such as request delivery by multiple trainers (Davis, Brady, Williams, & Hamilton, 1992), appear to be necessary to produce optimal clinical effects.

One potential strategy for promoting long-term gains in compliance after use of the high-*p* request sequence is stimulus fading. Stimulus fading involves the systematic alteration of the stimulus controlling a response so that the response is eventually controlled by a modified or completely new stimulus (Martin & Pear, 1988).

We sought to broaden the applicability of the high-*p* request sequence in two ways. First, we examined the use of this intervention in conjunction with stimulus fading to promote maintenance of the compliance gains. This was done through the gradual fading of the stimulus complex—the pre-task request sequence—which controlled high levels of compliance. By systematically reducing the number of high-*p* requests and increasing the latency between high- and low-*p* requests, we hypothesized that compliance could be maintained even after use of the high-*p* sequence had been discontinued.

The second extension involved evaluation of the intervention in the subjects' homes with the parents serving as therapists. Previous studies with momentum-based interventions employed teachers and clinical staff as intervention agents. This step is important to determine whether the procedure is a practical tool for improving compliance in the home. The intervention was evaluated with 2 children with developmental disabilities, and was examined separately for both "do" and "don't" requests, which can belong to separate response classes (Neef, Shafer, Egel, Cataldo, & Parrish, 1983).

## METHOD

### *Subjects and Settings*

Two children with developmental disabilities, who were referred to an outpatient treatment center

for behavior management of noncompliance to parental requests, served as subjects. Standardized tests placed Ralph, a 5-year-old boy, and Emma, a 15-year-old girl, at the mild and severe levels of mental retardation, respectively. Informal observations by therapists indicated that Ralph and Emma were able to perform all tasks required by specific requests without assistance. The subjects were required to comply with each request provided by the parent at least once, without prompting, in the presence of the therapists before inclusion in the study.

All sessions were conducted by the subjects' parents (i.e., the mothers of both subjects and Emma's father) in the family home. The specific location within the home was dependent upon the content of the requests (e.g., requests involving hygiene were issued in the bathroom).

### *Experimental Design*

A combination ABAB and multiple baseline design across subjects and "do" and "don't" requests was used to evaluate the high-*p* intervention. Fading and follow-up phases followed the last intervention phase. In addition, a multielement design was incorporated into the second baseline and high-*p* sequence phase of the symmetrical "don't" series with Emma (see below).

### *Dependent Variable and Recording Procedures*

The dependent measure was the percentage of compliance to low-*p* "do" and "don't" requests. However, the high-*p* request sequence had little or no effect on Emma's compliance to "don't" requests. For this reason, the dependent variable was modified to include compliance to symmetrical requests. Symmetrical requests were defined as "do" requests that required the same behavior of Emma as "don't" requests. The behavior was requested in an affirmative rather than negative format. For example, a request such as "stand up" was used in place of "don't lie on the floor." The symmetrical requests were used in the same situations as the "don't" requests (i.e., when Emma was exhibiting responses that she typically refused to terminate).

Low-*p* requests were those requests to which a

compliant response was obtained for less than 40% of opportunities during the compliance assessment phase. Compliance was defined as the initiation of the requested response within 10 s of the request and the eventual completion within 60 s or before the next request was issued. Percentages of compliance were calculated separately for "do" and "don't" requests by dividing the number of compliant responses by the total number of requests issued that session and multiplying by 100%.

Compliance and noncompliance to requests were recorded from videotapes of each session. Event recording was used to code all compliance data. Each event was initiated by a request provided by the parent and ended by one of three subject response alternatives: (a) successful completion of the requested response within 60 s of the request, (b) failure to complete the requested response within 60 s, or (c) failure to initiate the requested response within 10 s (the first two options were applicable only if the requested response was initiated within 10 s of the request).

### *Interobserver Agreement*

Two independent observers recorded compliance to "do" and "don't" low-*p* requests from the videotapes of each session. Interobserver agreement on compliance was obtained on a minimum of 21% of randomly selected sessions in each experimental phase. Interobserver agreement was calculated on a trial-by-trial basis. Percentages were obtained by dividing the number of agreements by the total number of agreements plus disagreements in a particular phase and multiplying by 100%. Occurrence agreement averaged 96% for baseline (range, 80% to 100%), 92% for the first high-*p* sequence phase (range, 80% to 100%), 94% for the second baseline phase (range, 80% to 100%), 92% for the second high-*p* sequence phase (range, 80% to 100%), 88% for the sequence fading phase (range, 60% to 100%), and 95% for follow-up sessions (range, 80% to 100%). Nonoccurrence agreement averaged 100% for baseline, 95% for the first high-*p* sequence phase (range, 60% to 100%), 91% for the second baseline (range, 50% to 100%), 93% for the second high-*p* sequence phase (range, 80% to 100%), 91% for the sequence fading phase

(range, 60% to 100%), and 95% for follow-up sessions (range, 60% to 100%).

### *Consumer Satisfaction*

Parents were asked to complete the applicable sections of the Parent's Consumer Satisfaction Questionnaire (Forehand & McMahon, 1981; McMahon, Tiedemann, Forehand, & Griest, 1984) during follow-up. These sections pertained to satisfaction with the overall program and satisfaction with the therapist. Items were scored on a 7-point scale, with 7 representing the highest degree of satisfaction with the intervention.

### *Assessment of Compliance Probabilities*

*Parent-completed checklist.* To determine the specific high-*p* and low-*p* requests to be used during sessions, we provided parents with a list of approximately 200 commonly used requests from several compliance domains, such as hygiene (e.g., "wash your face"), social interaction (e.g., "give me a hug"), and dressing (e.g., "put on your sweater"). Parents rated each request according to the likelihood of compliance by the subjects, as follows: (a) "almost always" (76% to 100% of the time), (b) "usually" (51% to 75% of the time), (c) "occasionally" (26% to 50% of the time), and (d) "rarely" (0% to 25% of the time).

A pool of 20 different high-*p* "do" requests (e.g., "shake my hand") was developed from the requests that were rated in the "almost always" category by the parents. A pool of 20 different low-*p* requests was also generated (10 "do" and 10 "don't" requests). The low-*p* "do" requests (e.g., "pick up your toys") were selected from those rated in the "rarely" category by parents. Because the checklist contained few "don't" requests, we asked parents to name activities that the subjects often refused to terminate when requested. The low-*p* "don't" requests (e.g., "stop playing with the water in the sink") were selected for each subject based on these responses.

*Empirical assessment.* The 20 high-*p* and low-*p* requests were assessed to determine each subject's percentage of compliance to each request. The second author videotaped the subjects and their parents during five sessions on separate days. During

each session, parents issued all of the requests from each of the high- $p$  and low- $p$  categories in randomized order. We instructed the parents to present the requests naturally, at a rate of approximately one every 60 s. For "don't" requests, subjects were allowed to engage in the activity that they typically refused to terminate when asked (e.g., playing in water, coloring, etc.). Once the subject was involved in the activity, the parent issued the "don't" request.

Requests to which subjects complied over 80% of the time (at least four of the five opportunities over the five sessions) defined a pool of high- $p$  requests to be used in the high- $p$  request sequence. Only those high- $p$  requests that yielded compliance within 10 s were included in the high- $p$  sequence (e.g., "give me a hug," "give me five," etc.). Low- $p$  requests were those that resulted in 40% compliance or less (compliance to no more than two of the five presentations of each request). Five high- $p$  "do" requests and five each of low- $p$  "do" and "don't" requests were selected for each subject for inclusion in the study.

### *Procedure*

**Baseline.** During baseline and all subsequent conditions, the "do" and "don't" low- $p$  requests were provided in separate sessions, with the order of "do" and "don't" sessions determined randomly (for Emma, separate sessions were conducted by each parent). Only one of each type of session, separated by a 10- to 15-min break, was typically conducted each day for each subject. The five low- $p$  requests were issued in random order at a rate of approximately one per minute (slightly longer for "don't" requests). Parents provided descriptive praise immediately contingent upon compliance to requests (e.g., "that's great, you stopped coloring when I asked you!"). When subjects failed to meet the compliance criteria, parents were instructed to avoid eye contact until the next request was provided.

Baseline conditions were reintroduced after the high- $p$  request sequence was evaluated (see below). During the high- $p$  request sequence condition, Emma's responses to "don't" requests showed little

improvement. For this reason, we introduced sessions comprised of symmetrical requests into the second baseline phase for Emma (without a preceding high- $p$  sequence).

**High-probability request sequence.** The first high- $p$  request sequence condition was identical to baseline except that each of the five low- $p$  requests in the "do" and "don't" request sessions was preceded by a sequence of three high- $p$  requests. Parents issued the high- $p$  requests (randomly ordered and selected from the five available high- $p$  requests prior to each session) at a rate of one approximately every 10 s, immediately before the low- $p$  request. The latency between the compliant response to the final high- $p$  request and the provision of the low- $p$  requests was 5 s or less. Descriptive praise was delivered as a consequence of compliance to all requests (both high  $p$  and low  $p$ ), and noncompliance was ignored. If the child was noncompliant to the first high- $p$  request in the sequence, the request was voided and the sequence was reinitiated.

During the second high- $p$  request sequence phase, which followed the second baseline phase, the high- $p$  request sequence was again provided immediately before "do" and "don't" requests and, for Emma, was introduced for the first time prior to symmetrical requests.

**High-probability request fading.** After compliance to low- $p$  requests had stabilized at high levels in the second high- $p$  request phase, high- $p$  requests were faded by gradually reducing the number of high- $p$  requests and gradually increasing the time between the high- $p$  request and the low- $p$  request. Fading took place during six separate stages. The first stage reduced the number of high- $p$  requests from three to two. The second stage reduced these requests to one. In the third stage, a delay of approximately 10 s was introduced between compliance to the single high- $p$  request and the delivery of the low- $p$  request. During this 10-s delay (and the delays in subsequent fading stages), the parent did not speak with the subject to avoid diminishing the effect of the high- $p$  request. During the fourth and fifth stages, the delay between the high- $p$  and low- $p$  requests was increased to 15 s and 20 s,

respectively. In the final stage, the 20-s delay was maintained, and the parent engaged the subject in conversation during the delay. Approximately two sessions were completed at each stage of fading.

Fading was conducted with "do" requests for both subjects, "don't" requests for Ralph, and symmetrical requests for Emma. "Don't" request sessions were eliminated during the fading phase for Emma and replaced with symmetrical "do" requests because the high-*p* request procedure proved to be more effective with symmetrical requests than with the equivalent "don't" requests.

*Maintenance.* This phase replicated baseline conditions (i.e., low-*p* requests were issued without high-*p* requests). Follow-up data were collected at 1-, 3-, 6-, 8-, and 16-week intervals.

### *Procedural Integrity*

Two independent observers recorded procedural integrity on 36% of randomly selected high-*p* request sequence sessions and 47% of the fading sessions selected randomly from all six fading stages for each subject. Correct occurrence of the high-*p* request sequence was defined as the issuance of three high-*p* requests, spaced approximately 10 s apart ( $\pm 2$  s) before each low-*p* request. The primary observer recorded correct occurrence of the high-*p* request sequence 77% of the time (range, 40% to 100%). Occurrence and nonoccurrence interobserver agreement on correct delivery of the high-*p* request sequence averaged 93% (range, 67% to 100%) and 97% (range, 50% to 100%), respectively.

Correct occurrence of the fading steps was defined as providing the correct number of high-*p* requests followed by the appropriate latency ( $\pm 2$  s). The primary observer recorded correct occurrence of each fading step 89% of the time (range, 60% to 100%). Occurrence and nonoccurrence interobserver agreement on correct delivery of the fading steps averaged 98% (range, 75% to 100%) and 100%, respectively.

Compliance to high-*p* requests was defined as the initiation and completion of the requested response within 10 s of the request. The primary observer recorded compliance to high-*p* requests

during high-*p* request sequence sessions 87% of the time (range, 64% to 100%). Occurrence and non-occurrence agreement on compliance to high-*p* requests during high-*p* request sequence sessions averaged 95% (range, 77% to 100%) and 98% (range, 75% to 100%).

The primary observer recorded compliance to high-*p* requests during fading sessions 95% of the time (range, 67% to 100%). Occurrence and non-occurrence agreement on compliance to high-*p* requests during sequence fading sessions averaged 97% (range, 80% to 100%) and 86% (range, 0% to 100%).

## RESULTS

Figure 1 shows percentages of compliance to low-*p* requests for the 2 subjects during each session across all phases of the study. For both subjects (and for both mother and father with Emma), overall percentage of compliance to "do" requests increased substantially from baseline (30% for Ralph; 10% for Emma with her mother, 25% with her father) to the high-*p* request phase (86% for Ralph, 80% for Emma with both her mother and father). For Ralph, similar improvements were noted with "don't" requests (22% in baseline; 68% in the high-*p* request phase). Such improvements were not observed with "don't" requests for Emma. Overall percentage of compliance in baseline for "don't" requests was 24% for mother and 28% for father. When the high-*p* request sequence was introduced, only a small increase was observed (33% for mother and 40% for father).

In the second baseline phase, overall percentage of compliance to "do" requests returned to baseline levels for both subjects (13% for Emma with her father, 20% with her mother; 35% for Ralph). Compliance to "don't" requests was 20% for Emma with her father, 12% with her mother, and 40% for Ralph. Emma's compliance to symmetrical requests before the high-*p* request intervention was 28% with her father and 52% with her mother.

With the reintroduction of the high-*p* request sequence in the second intervention phase, overall percentage of compliance to "do" requests recov-

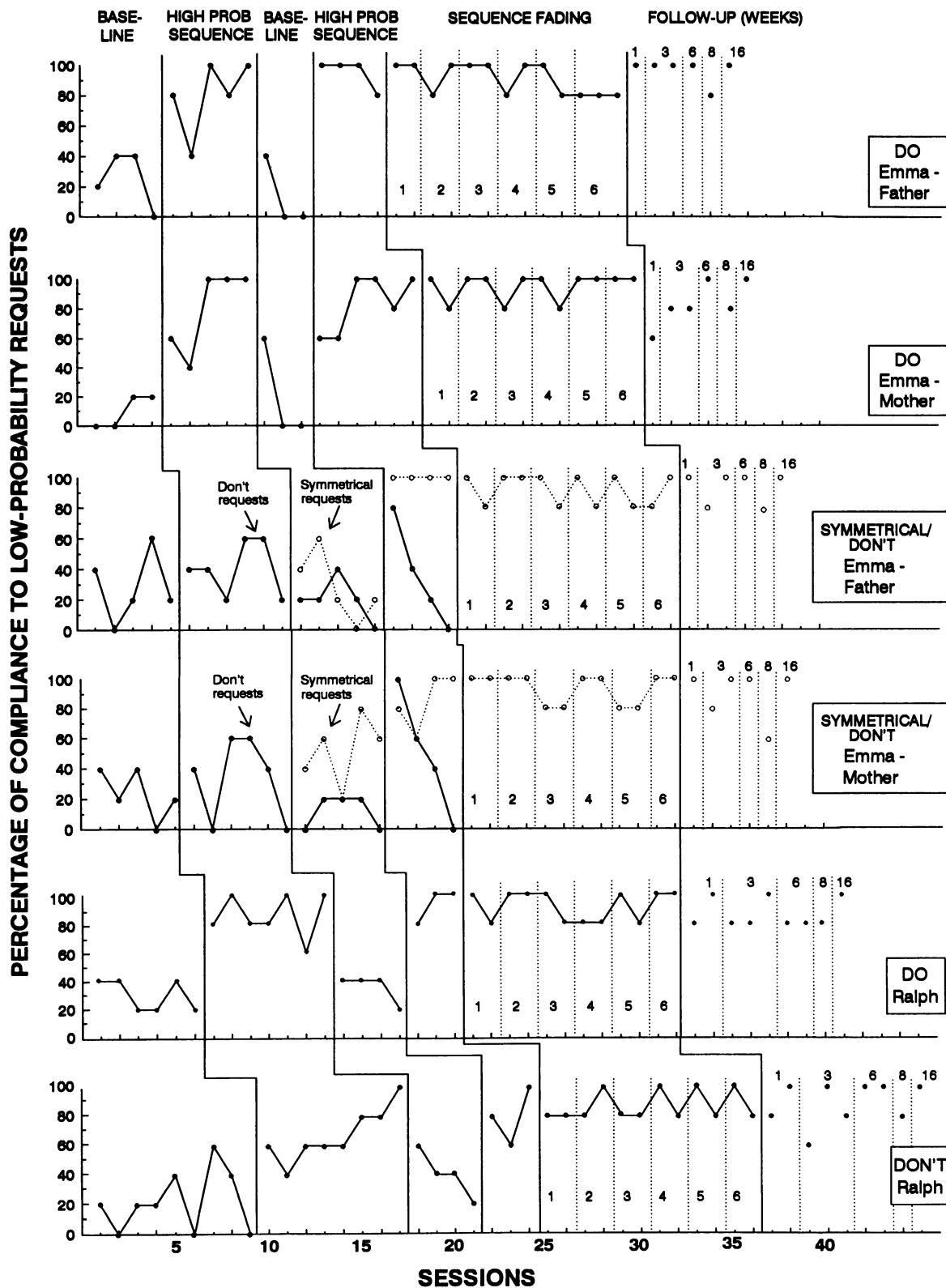


Figure 1. Percentage of compliance to low-probability "do," "don't," and symmetrical "do" requests, by subject and parent.

ered to 95% for Emma with her father, 83% with her mother, and 93% for Ralph. Similarly, compliance to "don't" requests for Ralph increased to 80%. As in the first high-*p* request phase, compliance to "don't" requests for Emma showed little improvement in this phase (35% for father and 50% for mother). Emma's compliance to "don't" requests was initially high but gradually decreased to zero with both parents over the four sessions in this phase. However, compliance to symmetrical requests increased using the high-*p* request procedure. Overall percentage of compliance to symmetrical requests was 100% for the father and 85% for the mother. "Don't" request sessions were discontinued with Emma after this phase because the high-*p* request sequence had little effect on compliance to "don't" requests and was highly effective with symmetrical requests, which could be substituted for "don't" requests in most situations.

Compliance was maintained at high levels for both subjects during the high-*p* request fading phase. Mean percentage of compliance to "do" requests during the fading phase was 91% for Emma with her father and 95% with her mother, and 92% for Ralph. Compliance to symmetrical requests averaged 92% and 93% for Emma with her father and mother, respectively. Ralph averaged 87% compliance to "don't" requests.

During the 16 weeks of follow-up, compliance levels remained at 80% or above for both subjects, with the exception of one "do" and one symmetrical session for Emma (with mother) and one "don't" session for Ralph.

Responses to the Parent's Consumer Satisfaction Questionnaire showed a high degree of satisfaction with the intervention. Emma's parents' ratings on separate subscales representing satisfaction with the overall program and with the therapist were 5.8 and 6.2, respectively. Ralph's mother provided a satisfaction score of 6.9 with the overall program and 6.2 with the therapist.

## DISCUSSION

We extended research applying the concept of behavioral momentum to the treatment of non-

compliance. The results indicate that the high-*p* request sequence could be successfully faded in both subjects without loss of compliance gains. Second, when the high-*p* request sequence was used with "do" requests for both subjects and "don't" requests for Ralph, compliance was increased, providing evidence of the efficacy of this strategy when implemented by parents in the home. Third, although the high-*p* request sequence did not produce clinically significant increases in compliance for "don't" requests with Emma, the procedure was effective when symmetrical "do" requests were used in place of "don't" requests. Fourth, follow-up data collected up to 16 weeks after the last fading session indicated that improved compliance had been maintained. Finally, the results of a consumer satisfaction questionnaire showed that parents were pleased with the intervention and its results.

Maintenance of the effects of the high-*p* request intervention after its withdrawal extends the findings of previous studies (e.g., Mace et al., 1988; Singer et al., 1987) that have shown a decrease in compliance when the intervention was withdrawn. In the present study, we obtained durable changes in compliance to low-*p* requests through the gradual withdrawal of the high-*p* request sequence after a demonstration that the abrupt withdrawal of the sequence produced a reversal of compliance effects. This finding provides supportive evidence for our hypothesis that stimulus control of compliance can be gradually transferred from the stimulus complex of three high-*p* requests and one low-*p* request, which controlled compliance before fading, to the low-*p* request alone. The addition of this fading technique may expand the clinical utility of the high-*p* request sequence to situations in which the continued use of this intervention would be inconvenient or undesirable.

Our results also extend the effectiveness of the momentum-based intervention to use by parents. Compliance sessions in previous studies using this procedure were conducted by teachers or clinicians (e.g., Davis et al., 1992; Mace et al., 1988; Singer et al., 1987). In the present research, parents were able to produce and maintain sizable improvements in the compliance of their children when using the

high-*p* request intervention. In addition, social validation measures indicated that parents expressed a high degree of satisfaction with the intervention. Informal interviews also indicated that the parents were comfortable with the procedures and found them easy to implement.

Although the high-*p* request procedure was highly effective with "do" requests for both subjects and "don't" requests for Ralph, the strategy did not produce the predicted increases in compliance for "don't" requests with Emma. One possible account for this is that the antecedent request sequence consisted of high-*p* "do" requests, whereas the low-*p* requests were "don't" requests. Previous research has suggested that compliance with "do" and "don't" requests constitutes different response classes (Neef et al., 1983). The effects of the high-*p* request sequence may be less dependable with "don't" requests, in that the behavioral momentum may be disrupted more by the shift across stimulus classes that occurs when high-*p* "do" requests are used before "don't" requests.

It is also possible that noncompliance to "don't" requests had a stronger history of reinforcement for Emma than did noncompliance to "do" requests. All of the "don't" requests used with Emma in this study involved the cessation of an activity in which she was highly likely to engage when possible. Because high-frequency activities are likely to have reinforcing qualities (Premack, 1959), compliance to a "don't" or "stop" request that requires the termination of such an activity may be especially difficult to achieve. It should also be noted that compliance to "don't" requests may be less likely to be reinforced by parents than compliance to "do" requests (Neef et al., 1983). Over time, "don't" requests may therefore have become discriminative for the availability of reinforcement through noncompliance and were less responsive to improvement via the high-*p* request sequence than were symmetrical "do" requests.

There are several areas of future research suggested by the present study. First, an examination of the high-*p* request fading strategy with a larger number of individuals and with persons without developmental disabilities would assess the gener-

ality of the present findings. Second, future studies should investigate procedures for developing the present intervention into a clinically efficient generalized compliance training procedure. The use of a larger number of requests from diverse request domains (e.g., dressing, hygiene, clean-up requests) may broaden the range of requests for which generalization is obtained (e.g., Day & Horner, 1989; Ducharme & Feldman, 1992; Ducharme & Popynick, 1993; Horner, McDonnell, & Bellamy, 1986). Third, further examination of the fading strategy is needed to determine whether all of the fading steps used in the present study are necessary to maintain the compliance gains. Finally, research comparing "don't" and symmetrical "do" requests should be conducted to determine the conditions under which the finding of improved compliance levels with symmetrical requests is likely to occur. Such investigations may provide practical information for parents and other caretakers who often use "don't" requests routinely with children.

## REFERENCES

- Davis, C. A., Brady, M. P., Williams, R. E., & Hamilton, R. (1992). Effects of high-probability requests on the acquisition and generalization of responses to requests in young children with behavior disorders. *Journal of Applied Behavior Analysis*, 25, 905-916.
- Day, H. M., & Horner, R. H. (1989). Building response classes: A comparison of two procedures for teaching generalized pouring to learners with severe disabilities. *Journal of Applied Behavior Analysis*, 22, 223-229.
- Ducharme, J. M., & Feldman, M. A. (1992). Comparison of staff training strategies to promote generalized teaching skills. *Journal of Applied Behavior Analysis*, 25, 165-179.
- Ducharme, J. M., & Popynick, M. (1993). Errorless compliance to parental requests: Treatment effects and generalization. *Behavior Therapy*, 24, 209-226.
- Forehand, R., & McMahon, R. J. (1981). *Helping the noncompliant child: A clinician's guide to parent training*. New York: Guilford.
- Hobbs, S. A., Forehand, R., & Murray, R. G. (1978). Effects of various durations of time-out on the noncompliant behavior of children. *Behavior Therapy*, 9, 652-656.
- Horner, R. H., Day, H. M., Sprague, J., O'Brien, M., & Heathfield, L. T. (1991). Interspersed requests: A non-aversive procedure for reducing aggression and self-injury during instruction. *Journal of Applied Behavior Analysis*, 24, 265-278.



- Horner, R. H., McDonnell, J. J., & Bellamy, G. T. (1986). Teaching generalized skills: General case instruction in simulation and community settings. In R. H. Horner, L. H. Meyer, & H. D. Fredericks (Eds.), *Education of learners with severe handicaps: Exemplary service strategies* (pp. 289-314). Baltimore: Paul H. Brookes.
- Houlihan, D., Sloane, H. N., & Jones, R. N. (1992). A review of behavioral conceptualizations and treatments of child noncompliance. *Education and Treatment of Children, 15*, 56-77.
- Mace, F. C., Hock, M. L., Lalli, J. S., West, B. J., Belfiore, P., Pinter, E., & Brown, D. K. (1988). Behavioral momentum in the treatment of noncompliance. *Journal of Applied Behavior Analysis, 21*, 123-141.
- Martin, G. L., & Pear, J. (1988). *Behavior modification: What it is and how to do it*. Englewood Cliffs, NJ: Prentice-Hall.
- McMahon, R. J., Tiedemann, G. L., Forehand, R., & Griest, D. L. (1984). Parental satisfaction with parent training to modify child noncompliance. *Behavior Therapy, 15*, 295-303.
- Neef, N. A., Shafer, M. S., Egel, A. L., Cataldo, M. F., & Parrish, J. M. (1983). The class specific effects of compliance training with "do" and "don't" requests: Analogue analysis and classroom application. *Journal of Applied Behavior Analysis, 16*, 81-99.
- Nevin, J. A. (1979). Reinforcement schedules and response strength. In M. Zeiler & P. Harzem (Eds.), *Reinforcement and organization of behavior* (pp. 117-158). New York: Wiley.
- Parrish, J. M., Cataldo, M. F., Kolko, D., Neef, N. A., & Egel, A. (1986). Experimental analysis of response covariation among compliant and inappropriate behavior. *Journal of Applied Behavior Analysis, 19*, 241-254.
- Premack, D. (1959). Toward empirical behavior laws: I. Positive reinforcement. *Psychological Review, 66*, 219-233.
- Roberts, M. W. (1982). Resistance to timeout: Some normative data. *Behavioral Assessment, 4*, 237-246.
- Roberts, M. W. (1984). An attempt to reduce timeout resistance in young children. *Behavior Therapy, 15*, 210-216.
- Scarboro, M. E., & Forehand, R. (1975). Effects of response-contingent isolation and ignoring on compliance and oppositional behavior of children. *Journal of Experimental Child Psychology, 19*, 252-264.
- Singer, G. H., Singer, J. S., & Horner, R. H. (1987). Using pretask requests to increase the probability of compliance for students with severe disabilities. *Journal of the Association for Persons with Severe Handicaps, 12*, 287-291.
- Whitman, T. L., Zakaras, M., & Chardos, S. (1971). Effects of reinforcement and guidance procedures on instruction-following behavior of severely retarded children. *Journal of Applied Behavior Analysis, 4*, 283-290.

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